

ABSTRACT OF THE DISCLOSURE

A variable gain amplifier device comprises
a variable gain amplifier circuit which amplifies
a difference between an input signal and a feedback
5 signal to output an output signal, a feedback circuit
which supplies the feedback signal to the variable gain
amplifier circuit, and a controller which controls
the variable gain amplifier circuit and the feedback
circuit to decrease a cutoff frequency of the feedback
10 circuit according to increase of a gain of the variable
gain amplifier circuit or vice versa.